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AUTHOR Hall, John W.  
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## ABSTRACT

The purpose of this study was to determine if Halpin and Croft's organizational climates as identified by the Organizational Climate Description Questionnaire were congruent with Likert and Likert's organizational systems as measured by the Profile of a School Instrument. Both instruments were administered to all teachers in 23 elementary schools. Statistical analysis revealed a positive significant relationship between the two models of organization type. Attempts to create a classification system for organizations were supported by the finding that organizational structures differ on certain dimensions. (RA)

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A COMPARISON OF HALPIN & CROFT'S ORGANIZATIONAL CLIMATES  
AND  
LIKERT & LIKERT'S ORGANIZATIONAL SYSTEMS

by  
John W. Hall  
St. Lawrence University  
Canton, New York

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# A COMPARISON OF HALPIN & CROFT'S ORGANIZATIONAL CLIMATES AND LIKERT & LIKERT'S ORGANIZATIONAL SYSTEMS

## INTRODUCTION

One of the new dimensions in educational administration is the study of organizational types and the variables that compose these types. Studies of organizational types have resulted in the conceptualization of organizational models for the purpose of facilitating an analysis of how organizations actually function as well as providing a guide whereby a new direction may be provided. The identification of clusters of variables interacting in different patterns is essential to organizational classification. The descriptive terms associated with the different patterns of interacting variables become more meaningful and useful as the quantitative procedures for measuring them improve.

Traditionally, there have been attempts to classify organizations on the basis of primary functions such as membership and clientele, and secondary functions such as manufacturing, education, military, and other factors such as size. This practice of classifying organizations on the basis of primary functions has created much confusion since business organizations for example, are viewed as somehow different from educational organizations. It is important to look at organizations from a different point of view than in the past. Administrative studies on organizations need to be directed towards organizations as "...a mechanism of control and power capable of being subdivided into types which vary widely in degree and form of control and power and in relationships of leaders to lead."<sup>1</sup> For example, some organizations leave little room for participative involvement or individual freedom while others allow a great deal of participative in-

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<sup>1</sup>Paul P. Van Riper, "Organizations: Basic Issues and a Proposed Typology," Studies on Behavior in Organizations: A Research Symposium, ed. Raymond V. Bowers (Athens, Georgia: University of Georgia Press, 1966), p. 10.

volvement and individual freedom. This typology of organizations contrasted with the traditional classification of organizations allows one to view business, military, educational, or other organizations along dimensions other than functions. It is a classification system which permits clear delineation and understanding of the variables that comprise the different types. A number of organizational typologies have been conceptualized in recent years, such as those of Blau & Scott, McGregor, Argyris, Van Riper, Halpin & Croft and Likert. These typologies serve as models and provide the basis for many of the new theories in administration. However, in the interests of theoretical parsimony, it may be useful to identify common elements within the various organizational conceptualizations advanced today.

An examination of some organizational models reveal the presence of different types of organizations existing between two extremes. Gouldner<sup>2</sup> has conceptualized two types of organizations which he refers to as the rational model and the natural system model. In the rational model, the organization is viewed much like a machine with interchangeable manipulable parts which the administration may modify to increase the efficiency of the whole - virtually "organization against people."<sup>2</sup> & <sup>3</sup> This view is similar to Max Weber's principles of bureaucracy. The natural system model is one in which the organization is perceived as spontaneously maintained by individuals who have needs which must be satisfied regardless of the

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<sup>2</sup>Alvin W. Gouldner, "Organizational Analysis," Sociology Today: Problems and Prospects, ed. Robert K. Merton, Leonard Bloom, and Leonard S. Cottrell, Jr. (New York: Basic Books, 1959), pp. 400-28.

<sup>3</sup>Glenn G. Eye, Russell T. Gregg, James M. Lipham, Lanore A. Netzer and Donald C. Francke, "Relationship Between Instructional Change and the Extent to Which School Administrators and Teachers Agree on the Location of Responsibilities for Administrative Decisions," Cooperative Research Project No. 5-0443 (Madison, Univ. of Wisconsin, 1966), p. 2 (mimeographed)

plans of the creators or maintainers of the organization.<sup>4</sup> This system has recently been expounded by Argyris<sup>5</sup>. Earlier, Mayo<sup>6</sup> and Roethlisberger<sup>7</sup> described its merits.

Organizations of this type hold that individuals are the most significant component of an organization and although formal organization exists it does so at the pleasure of individuals singly or collectively within the formal organization. The aim of the informal organization is to achieve the goals of the individuals rather than the goal of the organization - virtually, "people against organization."<sup>8</sup> The evidence needed to support the contention that one of these extremes is the more productive organization, or which type of organization somewhere between the extremes is the most productive, is not available.

McGregor<sup>9</sup> has described contrasting sets of management philosophies which he labels theory X and theory Y. Administrators who follow the theory X principles are involved in an organization similar to the rational model expounded by Gouldner and those who follow the theory Y principles are involved in an organization similar to the natural system model.

The basic difference between the organization operating under theory X and theory Y principles is the way the administrator views his work force. The administrator who operates the organization under theory X

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<sup>4</sup>Eye, et al, loc. cit.

<sup>5</sup>Chris Argyris, Personality and Organization (New York: Harper and Brothers, Publishers, 1957).

<sup>6</sup>Elton Mayo, The Social Problems of an Industrial Civilization (Boston: Harvard Business School, 1945).

<sup>7</sup>Fritz J. Roethlisberger and William J. Dickson, Management and the Worker (Cambridge, Massachusetts: Harvard University Press, 1939).

<sup>8</sup>Eye, et al, op. cit., p. 3.

<sup>9</sup>Douglas McGregor, The Human Side of Enterprise (New York: McGraw-Hill Book Company, 1966).

principles perceives that the members of the work force must be coerced, directed and their behavior controlled, The administration views the employees as instruments and tools rather than human beings. The administrator who operates the organization under theory Y principles perceives that members of the work force are motivated by needs of their own and that they are not motivated by force. The administrator in this organization views his job as helping each employee achieve his objectives in his own way. This type of administrator possesses confidence in the ability, initiative, and integrity of the subordinate, and his willingness to assume responsibility.<sup>10</sup>

The McGregor dichotomy of theory X and theory Y or the Gouldner dichotomy of the rational system model and the natural system model indicate organizational extremes, i.e., whether man plans his own activities or whether his activities are planned for him.

Weber, in the first part of the century, outlined four types of organizations. The key distinction among the four types of organization is based on what justifies the exercise of authority and what makes authority legitimate. Weber refers to these types of organizations as "charismatic authority," "traditional authority," "rational-legal authority," and "collegial authority."<sup>11</sup>

The development of a taxonomic classification of organizations has been proposed or implied by others. Van Riper directs attention to the taxonomy problem and proposes the following: "A typology of organization

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<sup>10</sup>Robert A. Howell, Organization Planning and Control (Wayne, Pennsylvania: Management Development Institute, Inc., 1968), p. 6.

<sup>11</sup>Max Weber, The Theory of Social and Economic Organization, translated by A.M. Henderson and Talcott Parsons (New York: The Free Press of Glencoe, 1947).

based on where each stands with reference to eleven great (organizational) issues," or "authoritarianism-permissiveness."<sup>12</sup> He sees each of these "issues" as a continuum of values and suggests that any organization's degree of internal cohesiveness is related to the consistency of its ratings among the eleven continua. Etzioni<sup>13</sup> has grouped organizations according to whether the main basis of discipline in the organization is payment, force, or moral obligation.

Guetzkow has described another possible taxonomic classification, which is as follows: "A typology of interactional relations between (rather than within) organizations,"<sup>14</sup> and he suggests a somewhat comprehensive conceptual framework within which the study of inter-organizational relations may proceed. He classifies them, first of all, as taking place at three locations: within each other's boundary (what he terms "inter-penetrations"), at the boundary, and beyond the boundary (through supra-organizational process), and gives a range of examples for each.

Organizational variability is as great as the variability among humans with respect to how objectives are achieved by planned group activity. The classification of this variability of organizations depends upon the identification of those variables that are related to the way organizations plan their activities, "the way they create, defend, replenish, and admin-

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<sup>12</sup>Paul P. Van Riper, "Organizations: Basic Issues and a Proposed Typology," Studies on Behavior in Organizations: A Research Symposium, ed. Raymond V. Bowers (Athens, Georgia: University of Georgia Press, 1966), pp. 1-12.

<sup>13</sup>Amitai Etzioni, A Comparative Analysis of Complex Organizations (New York: The Free Press of Glencoe, 1961).

<sup>14</sup>Harold Guetzkow, "Relations Among Organizations," Studies on Behavior in Organization: A Research Symposium, ed. Raymond V. Bowers (Athens, Georgia: University of Georgia Press, 1966), pp. 13-44.

ister their resources and their authority systems."<sup>15</sup> The development of organizational typologies or organizational classifications and the eventual development of a taxonomy of organizations may reduce some of the confusion that presently exists about organizations.

There have been some attempts to develop instruments for the purpose of classifying organizational types. In 1963, Halpin and Croft developed an instrument to classify types of educational organizations. This instrument known as the Organizational Climate Description Questionnaire (OCDQ) identified six types of organizational climates referred to as Closed, Paternal, Familiar, Controlled, Autonomous, and Open.

In 1968, Likert and Likert introduced another instrument to identify types of educational organizations. This instrument was an adaptation of an earlier instrument developed by Rensis Likert to identify types of industrial organizations. The Likert and Likert instrument, named Profile of a School, classifies educational organizations as one of four different systems types. Originally there were forms of the instrument for principals, teachers, and students. In 1969 these forms were revised and forms for School Board members, administrative staff, superintendent of schools and parents were added. Forms were also developed for the college level.

Are there existing relationships between any of the organizational models that have been referred to? Any evidence of the commonality or lack of commonality of these models would be helpful in the development of an organizational taxonomy. Evidence of this type may reveal whether or not there is an overlap of ideas and concepts that may be disguised by different terminology.

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<sup>15</sup> Arthur L. Strinchcombe, "Formal Organizations," Sociology: An Introduction, ed. Neil J. Smelser (New York: John Wiley & Sons, Inc., 1967), p. 167.



### PURPOSE OF THE STUDY

The purpose of this study was to determine if Halpin and Croft's organizational climates as identified by the OCDQ were congruent with Likert and Likert's organizational systems as measured by The Profile of a School Instrument (teacher form).

### DESIGN AND PROCEDURES OF THE STUDY

The study employed two measuring instruments designed to identify the organizational type of schools. One instrument, the OCDQ, was administered to all teachers in forty-three elementary schools. The scores on the OCDQ were analyzed to classify the school organizational climates as perceived by the faculty of each school. The second instrument, the Profile of a School Instrument (teacher form) was also administered to all the teachers in the same forty-three elementary schools. This instrument identified an organizational system of each school. The relationship between the climate of each school as measured by the OCDQ and the systems as measured by the Profile of a School Instrument (teacher form) were compared.

Table I compares the subtest dimensions of the OCDQ<sup>16</sup> and the Likert and Likert Profile of a School variables.<sup>17</sup> An empirical examination of the variables related to Halpin and Croft's organizational climates and Likert and Likert's organizational systems revealed a similarity. For example, Halpin and Croft's organizational climates referred to as Closed

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<sup>16</sup>Robert P. Plaxton, "Relationships Between Principals' Personality and the Organizational Climate of their Schools" (unpublished Master's Thesis, University of Alberta, 1965), pp. 37-39.

<sup>17</sup>System variables were identified by Rensis Likert for his industrial instrument, a description of which can be found in his book, The Human Organization: Its Management and Value (New York: McGraw-Hill Book Company, Inc., 1967). These same variables have been used by the investigator for the Likert and Likert Profile of a School instrument which was adapted from the industrial instrument.

**TABLE I**  
**A COMPARISON OF THE SUBTEST DIMENSIONS OF HALPIN AND CROFT'S ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE (OCCDQ)**  
**AND THE VARIABLES ASSOCIATED WITH LIKERT AND LIKERT'S PROFILE OF A SCHOOL INSTRUMENT**

Organizational Climate Description Questionnaire				Profile of a School Instrument	
Climate	High	Average	Low	Systems	Variables
Open	Esprit Thrust Consideration	Intimacy	Hindrance Disengagement Aloofness Production Emphasis	Systems	Supportive Leadership High Motivation Upward-downward and horizontal communication A lot of student, faculty, principal involvement Faculty shares in decision making Organizational goal setting by students, faculty, and principals
	Autonomous	Esprit Intimacy Aloofness Thrust	Consideration	III and	
Controlled	Disengagement Hindrance Production Emphasis	Thrust Aloofness Esprit	Disengagement Intimacy Consideration	IV	principals principal encourages self control High Performance
	Familiar	Disengagement Intimacy Consideration	Hindrance Aloofness Production Emphasis	Systems	Limited supportive leadership Low motivations Mainly downward communication Little student, faculty, principal involvement Little participation of faculty in decision making Organizational goal-setting mainly by the principal Principal exerts control over students and faculty Low performance
Paternal	Disengagement Production Emphasis	Thrust Consideration	Hindrance Intimacy Esprit Aloofness	I and	
	Closed	Disengagement Hindrance Aloofness Production Emphasis	Intimacy	II	

(Familiar-Paternal and Closed) have high loadings on Disengagement, Hindrance, Aloofness, and Production Emphasis while Likert and Likert's (Systems I and II) reflects limited supportive leadership, low motivations, mainly downward communication, and little participation of the faculty in decision-making. A decision on the hypothesis of this study will reveal whether or not there is an overlap of the Halpin and Croft model compared to the Likert and Likert model which may be camouflaged by terminology.

### Hypothesis

Halpin & Croft's Organizational Climates classified by the OCDQ indicate the same type of organization as Likert and Likert's organizational systems classified by the Profile of a School Instrument (teacher form).

### Identification of the Population

Consistency in the selection of the population was achieved through the use of the following criteria:

1. Any school system employing from 50 to 400 teachers was eligible for consideration and selection.
2. Each school system included in the population was within a radius of 200 miles of St. Lawrence University, Canton, N.Y. This radius included the area north of the forty-third degree parallel of Northern New York State which possess some characteristic differences but, on many points exhibited similarity and comparability from a standpoint of geographic type, the density of population, business and industrial characteristics, and transportation facilities.

### Selection of the Sample

A sample of forty-three schools from the population above participated in the study, selected on the basis of the school's willingness to participate.

### Administration of the Instrumentation

The investigator arranged meetings with the chief school administrator and the elementary school principals of twenty-four school systems. At this meeting the purpose of the study was discussed and the nature of the instrumentation was explained. Twenty-three of the twenty-four school systems agreed to participate in the study. All principals agreed to administer the two instruments at faculty meetings except the principal of one school system who requested the investigator to administer the instrument. The investigator complied with this request. Two school systems during the course of the study withdrew indicating that the pressure of other school responsibilities near the end of the school year necessitated their withdrawal. These same school systems indicated that they would be willing to participate in a similar study the following year. The final sample resulted in forty-three elementary schools from twenty-one school systems.

A sheet of directions was included with the instruments that the investigator gave to the elementary principals. Principals were instructed to contact all teachers not present at the faculty meetings and have them complete the instruments. In thirty-one schools all teachers completed the instrument. In the remaining schools 95 per cent or more of the teachers completed the instrument.

In twenty schools the OCDQ instrument was administered first and the Likert and Likert instrument immediately afterwards. In the other twenty-three schools the reverse process was employed.

The participants were requested not to sign their names or indicate their school's name on the instruments. A coding procedure was developed to preserve the anonymity of the schools, except to the researcher. This was necessary since each school was promised a report of the organizational profiles identified by the instruments.

#### Treatment of the Data

The data obtained from the administration of the OCDQ and the Profile of a School Instrument (teacher form) were processed in the following manner. The OCDQ responses were punched on data processing cards by an IBM 1232 scanner and electronically computed at the University of Georgia. Profile scores were identified for each school. These profiles were compared to the prototypic climates found by Halpin and Croft. This was accomplished by determining the congruency of each school's climate profile to the six prototypic climates. A similarity identification score yielding the lowest sum between the absolute difference of the two profiles indicated the two profiles that were most similar. All climates labeled Open, Autonomous, and Controlled were referred to as Open and all climates labeled Closed, Paternal, and Familiar were referred to as Closed. Figure 1 illustrates this categorization.

Closed Climates Closed-Paternal-Familiar	Open Climates Controlled-Autonomous-Open
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Figure 1

#### THE GROUPING OF HALPIN & CROFT'S SIX ORGANIZATIONAL CLIMATES INTO TWO CATEGORIES

Halpin and Croft's organizational climates were also placed on a continuum from 1-20. The idea of converting the organizational climate categories into a numerical continuum of openness was first utilized when Kirk in

consultation with Croft established such a continuum.<sup>18</sup> The investigator in this study established the limits of each organizational climate category as follows: Closed 0-3.33, Paternal 3.34-6.66, Familiar 6.67-10.00, Controlled 10.01-13.33, Autonomous 13.34-16.66, Open 16.67-20.00. The mid-points of the organizational climate category limits were used to give the organizational climate of each school a numerical value of openness of climate. Table II illustrates this point.

TABLE II  
HALPIN AND CROFT'S ORGANIZATIONAL CLIMATE CATEGORIES  
CONVERTED INTO A NUMERICAL CONTINUUM OF  
OPENNESS OF CLIMATE

	Type of Climate					
	Closed	Paternal	Familiar	Controlled	Autonomous	Open
Numerical Value of Openness of Climate	1.66	5.00	8.33	11.67	15.00	18.33

The Likert and Likert Profile of a School (teacher form) was hand-scored since a computer program was not available. A Likert scale with twenty gradations was applied to each variable identified by the instrument. These gradations were labeled in groups of five from left to right: Rarely, Sometimes, Often and Very Frequently. This provided a continuum of type of organizational system from 1-20. Values of 1 to 20 were assigned to the gradations from left to right. These numbers did not appear on the instruments. Scores of 0-5 represented a System I, 6-10 a System II, 11-15 a System III, and 16-20 a System IV. All scores were rounded off to the nearest whole.

<sup>18</sup>Treva B. Kirk, "The Behavior of New Teachers in Relation to the Organizational Climate of the School and the Dogmatism of the Teacher" (paper delivered at the annual convention of the American Educational Research Association, Chicago, February, 1965) (Mimeographed.)

The responses to each variable were tallied and an average score determined for each school. This score identified the organizational system as perceived by the teachers. Likert's four organizational systems were collapsed into two categories. Figure 2 illustrates the categorization.

Systems I and II	Systems III & IV
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Figure 2

#### THE GROUPING OF LIKERT AND LIKERT'S FOUR ORGANIZATIONAL SYSTEMS INTO TWO CATEGORIES

The hypothesis was concerned with the relationship of Halpin and Croft's organizational climates as classified by the OCDQ and Likert and Likert's organizational systems as classified by the Profile of a School Instrument (teacher-form). This hypothesis was first tested by converting the organizational climates of the forty-three schools as classified by the OCDQ into a numerical continuum of openness. The numerical continuum of openness scores were then correlated with the scores obtained from the same forty-three schools classified by the Profile of a School Instrument (teacher form). A Pearson product-moment correlation coefficient was used to determine this correlation. The significance of the observed correlation was determined at the .05 level.

Secondly, in the design of the study a biserial coefficient of correlation was to be used to test the relationship between Halpin and Croft's organizational climates classified by the OCDQ and Likert and Likert's organizational systems classified by the Profile of a School (teacher form). This was not possible since the dichotomy of the Systems I & II and Systems III & IV for the Profile of a School scores and the OCDQ scores dichotomized by open and closed did not occur near

the median. Any attempt to calculate a biserial coefficient under these conditions would present a distorted picture.

Thirdly, the occurrence of the frequencies of the Halpin and Croft organizational climate categories (open and closed) and the Likert and Likert organizational systems (Systems I & II and Systems III & IV) were applied to a 2 x 2 chi square. This is illustrated by Figure 3.

	Open	Closed
Systems III and IV	A	B
Systems I and II	C	D

Figure 3

CATEGORIZATION OF FREQUENCIES OF HALPIN AND CROFT'S OPEN AND CLOSED ORGANIZATIONAL CLIMATES AND LIKERT AND LIKERT'S (TEACHER FORM PART I) ORGANIZATIONAL SYSTEMS (SYSTEMS I AND II AND SYSTEMS III AND IV) OF FORTY-THREE ELEMENTARY SCHOOLS OF NORTHERN NEW YORK STATE

Fisher's Exact Probability test was applied to these data since the "C" cell resulted in zero frequencies. The strength of this relationship was then determined by relating the Fisher Exact Probability test results with a  $\phi$  coefficient. A 5 per cent level was used to evaluate the significance of the phi coefficient.

#### ANALYSIS OF THE DATA AND FINDINGS

The classification of the forty-three schools in this study by Halpin and Croft's OCDQ and Likert and Likert's Profile of a School Instrument (teacher form) is shown by Tables III and IV.



TABLE III

THE ORGANIZATIONAL CLIMATES OF FORTY-THREE ELEMENTARY SCHOOLS  
OF NORTHERN NEW YORK STATE CLASSIFIED BY THE OCDQ

	Type of Climate						Total
	Closed (N=30)			Open (N=13)			
	Closed	Paternal	Familiar	Controlled	Autonomous	Open	
Number of Schools	14	9	7	1	1	11	43

TABLE IV

THE ORGANIZATIONAL CLIMATES OF FORTY-THREE ELEMENTARY SCHOOLS  
OF NORTHERN NEW YORK STATE CLASSIFIED BY THE PROFILE OF A  
SCHOOL INSTRUMENT (TEACHER FORM)

	Type of System				Total
	Systems I and II (N=9)		Systems III and IV (N=34)		
	System I	System II	System III	System IV	
Number of Schools	0	9	32	2	43

The schools classified as open or closed organizational climates by Halpin and Croft's OCDQ were compared to the same schools classified as organizational (Systems I and II or Systems III and IV) by Likert and

Likert's Profile of a School Instrument (teacher form). This comparison is summarized by Table V which shows the schools that were classified as open or closed compared to the same schools classified as Systems I and II or Systems III and IV.

TABLE V

NUMBERS OF SCHOOLS CLASSIFIED BY HALPIN AND CROFT'S OCDQ  
AS OPEN OR CLOSED CLIMATES COMPARED TO THE SAME SCHOOLS  
CLASSIFIED BY LIKERT AND LIKERT'S PROFILE OF A SCHOOL  
(TEACHER FORM) AS SYSTEMS I AND II OR  
SYSTEMS III AND IV

System	Climate		Total
	Open	Closed	
Systems III and IV	13	21	34
Systems I and II	0	9	9
Total	13	30	43

The hypothesis that there is a relationship between Halpin and Croft's organizational climates classified by the OCDQ and Likert and Likert's organizational systems classified by the Profile of a School Instrument (teacher form) was supported by a positively significant  $r$  of .5943. To determine the significance of the observed correlation, the  $t$  distribution was used. At the 5 per cent level, 41 df. the critical value of  $r$  for significance is +.304.

This relationship between Halpin and Croft's organizational climates classified by the OCDQ and Likert and Likert's organizational systems classified by the Profile of a School Instrument (teacher form) was also tested

by using a biserial coefficient. The Halpin and Croft open and closed scores were made dichotomous and the Likert and Likert (Systems I and II and Systems III and IV) were treated as continuous. The resultant dichotomies of 70-30 for the open and closed climates and the 61-39 dichotomy for the Systems I and II and Systems III and IV were too distant from the median of these distributions to warrant the computation of a biserial coefficient. The investigator made the decision that the computation of the biserial coefficient would be a biased result since a very one-sided division of cases existed.

The same hypothesis was tested by treating the data illustrated in Table V above by Fisher's Exact Probability test. The observed frequency cell loadings can be broken down as follows:

Cell "A" = 13 -- open and Systems III and IV

Cell "B" = 21 -- closed and Systems III and IV

Cell "C" = 0 -- open and Systems I and II

Cell "D" = 9 -- closed and Systems I and II

The resultant probability that the two groups differ in the proportion with which they fall into two classifications as determined by the Fisher Exact Probability test is  $<.02$ . This analysis leads to the rejection of the hypothesis that Halpin and Croft's organizational climates classified by the OCDQ and Likert and Likert's organizational systems classified by the Profile of a School instrument (teacher form) differ. A phi coefficient corrected by Yates for the joint distributions yielded a correlation coefficient of .44 indicating the strength of the relationship. The rejection of the hypothesis by Fisher's Exact Probability test and the size of  $\phi$  supports the finding that there is a positively significant relationship between the organizational climates classified by Halpin and Croft's OCDQ

and the organizational systems classified by Likert and Likert's Profile of a School Instrument (teacher form).

An empirical study of cells "A", "C", and "D" illustrated by Table V support the thesis suggested in Table I where the variables associated with Halpin and Croft's open and closed organizational climates were illustrated to be similar to the variables associated with Likert and Likert's organizational systems (Systems III and IV and Systems I and II). These cell loadings support the hypotheses that: (1) Halpin and Croft's open organizational climates are comparable to Likert and Likert's Systems III and IV as classified by the Profile of a School Instrument (teacher form) and (2) Halpin and Croft's closed organizational climates are comparable to Likert and Likert's Systems I and II as classified by the Profile of a School Instrument (teacher form). The "B" cell loading fails to support these hypotheses. Empirically the data revealed that the results obtained from the instrumentation in twenty-two schools supported the hypotheses indicated above and the results obtained from the instrumentation in the other twenty-one schools failed to support these hypotheses. The investigator at this point raised the question of why did the loading of cell "B" fail to support the hypotheses mentioned above and empirically studies the available data for an explanation.

An empirical examination of the number of teachers in the school, the location of the school, the social and economic background of the area in which the school was located, and the instruments themselves gave no explanation to the answer of the question.

#### CONCLUSIONS

1. It was found that there is a positively significant relationship between Halpin and Croft's organizational climates as classified by the OCDQ

and Likert and Likert's organizational systems as classified by the Profile of a School Instrument (teacher form). This supports the concept that the Halpin and Croft organizational model from which the OCDQ was developed is comparable to the Likert organizational model from which the Profile of a School Instrument (teacher form) was developed.

2. It appears that organizational structures do differ on certain dimensions which support attempts to classify them. It is interesting to note that all the schools classified by Halpin and Croft's OCDQ as open were classified as either Systems III or IV by the Likert and Likert Profile of a School Instrument (teacher form) but that only nine of thirty schools classified as closed organizational climates by Halpin and Croft's OCDQ revealed Systems I and II as classified by Likert and Likert's Profile of a School Instrument (teacher form). An empirical analysis of available data gave no explanation to the answer of this phenomena.

#### SPECULATIONS

This research has provided some groundwork for a number of speculations in the area of organizational theory and research.

The first of these speculations is that the commonality of variables between Halpin and Croft's organizational climate model and the Likert and Likert organizational system model suggests the basis for the development of a taxonomy of organizational types. A continued study of the interrelationships of organizational classifications and the variables that comprise each type will be of importance towards the emergence of any organizational taxonomy.

Second, it may be that only the behavioral patterns of certain individuals within the school system are critical to the determination of organizational types. For example, there may be a significant relationship between organizational types and the chairman of departments, the supervisor of instruction, the individual who has been with the organization five to eight or more years, and the administrators. These key individuals through their influence of hiring, firing, and making the situation comfortable or uncomfortable for new personnel may have the impact of retaining within the organization only people who behave in ways similar to them and thereby tend to perpetuate a certain organizational type. Should research show that the behavioral patterns of certain personnel is a key variable this would have implications for those who wish to move an organization from one type to another. The development of an organizational taxonomy demands the identification of more and more variables that show promise of being worth exploring with respect to their relationship to organizational types.

Thirdly, there are only two instruments known to the investigator for collecting data about different educational organizational types. What is needed are more instruments, with the variables more clearly defined and their quality as data collecting devices established for the purpose of seeking and verifying information about organizational types.

Fourth, the present information available on organizational typology research studies is inconsistent and no dependable relationship among the variables has been demonstrated. Likert has suggested that the answer appears

. . . to be that /The identification of relationships/ among these variables at one point in time in an organization or group of organizations and computing correlations among the variables is much too simple a research design to yield accurate knowledge and insights.<sup>19</sup>

The nature of these inconsistencies, such as the behavioral patterns perceived by teachers and administrators and their actual behavioral patterns, must be related to the variables causing the contradictory results. As data are obtained to explain these inconsistencies the results are likely to indicate that there are consistent and dependable relationships among leadership, motivation, performance, and other variables that are related to organizational types. The implication involved is that the variables that may be related to organizational types must be more clearly identified and quantified before a more refined instrument can be developed to classify organizational types with the eventual emergence of a taxonomy of organizations.

Fifth, if the research of organizational typology results in a refined organizational taxonomy it may be possible to associate societal crisis to particular organizational types. For example, are the present college and university riots and demonstrations related to a particular type of organizational classification? Perhaps, the most important consequences of an organizational measuring instrument, which may be related to a taxonomy of organizations, is more related to some of societal ills.

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<sup>19</sup> Rensis Likert and David G. Bowers, "Organizational Theory and Human Resource Accounting" (address delivered to the American Psychological Association, August, 1968). (Mimeographed.)

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